

CLAIMS

1. A process for preparing microcrystalline cellulose in a continuous mode, the process being characterized in that it comprises the steps of:

- a) preparing a pulp by repulping,
- b) pressing the pulp obtained in a),
- c) decompacting the pulp obtained in b),
- d) feeding the pulp obtained in c) in a pre-heated reactor,
- 10 e) cooking the pulp with water vapor in the pre-heated reactor at a temperature, a time and pressure selected to obtain a pulp having a desired degree of polymerisation,
- f) cooling and depressurising the pulp by mixing it to water thereby obtaining a cooled pulp which comprises a mixture of cellulose and water,
- g) extracting the mixture of cellulose and water from the reactor without vaporisation of water,
- 20 h) filtering the extracted mixture of cellulose and water of step g) in order to obtain a filtered pulp,
- i) bleaching the filtered pulp obtained in h), and
- k) drying the pulp obtained in h),

22a

wherein in step g), the extraction of the mixture is carried out without interrupting continuous feeding and cooking of the pulp in steps d) and e).

2. A process according to claim 1, characterized in that in step a) the repulping is carried out at a consistency of 2 to 3%.

3. A process according to claim 1 or 2, characterized in that in step e) the cooking is carried out with the
10 addition of antioxidants.

4. A process according to any one of claims 1 to 3, characterized in that in step e) the cooking is carried out at a temperature varying from 210° to 235°C.

5. A process according to any one of claims 1 to 4, characterized in that in step e) the cooking time ranges between 4 and 25 minutes according to the desired degree of polymerisation.

6. A process according to any one of claims 1 to 5, characterized in that following the cooking step e), it
20 further comprises a purification step.
